

9th
NATIONAL
AMATEUR RADIO
CONVENTION

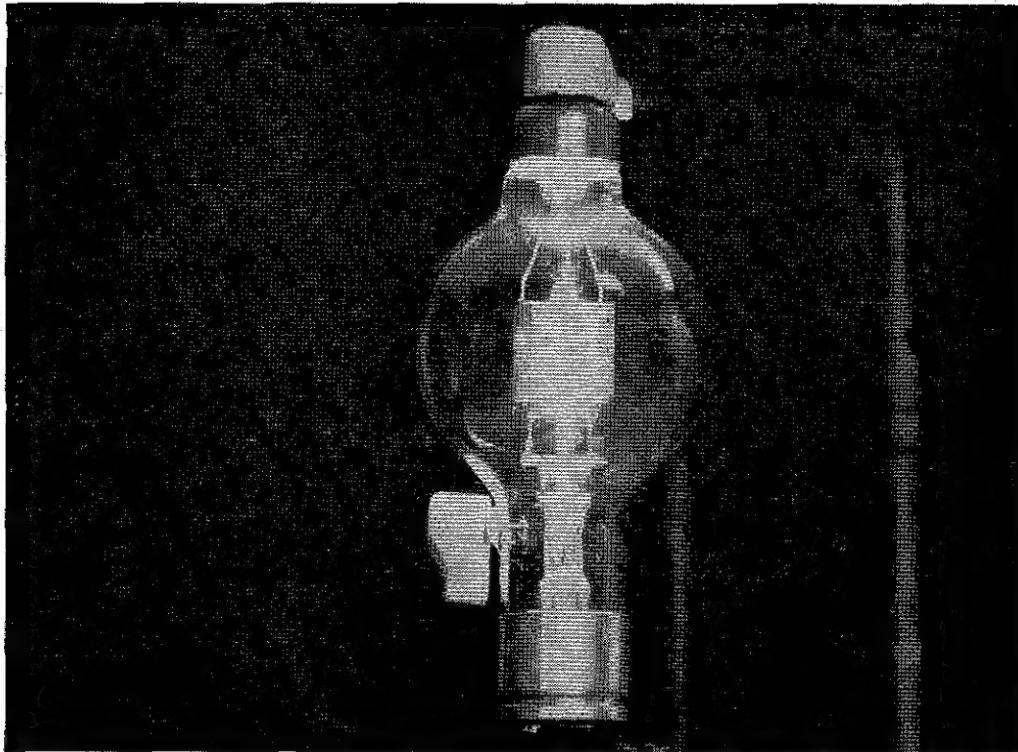
AMERICAN RADIO RELAY LEAGUE

•
2ND INTERNATIONAL CONVENTION
YOUNG LADIES RADIO LEAGUE

•
THE PALMER HOUSE • CHICAGO



August 30, 31 and September 1, 1957



22 year old, 50T in test after its recent return to Eimac.

FIRST EIMAC 50T RETURNS HOME AFTER 22 YEARS

This is the first Eimac 50T that ever rolled off the production line. It returned home as good as new—22 years after being given away as a prize at a Fresno hamfest in 1935. When it was received at the Eimac plant, it was placed into a series of tests. The 50T had retained its vacuum, without element deterioration. The tube took its rated input without irregular operation.

The amateur who must have the best dignifies his transmitter with Eimac tubes. This way he is assured of getting a product that is the result

of the finest engineering plus painstaking craftsmanship and construction.

Eimac, always aware of the strict requirements of the amateur for "tubes that can take it", is constantly improving, and adding to, its line of tubes. A request to the Amateur Service Bureau will bring immediate, comprehensive information about the tube of your choice.

EITEL-MCCULLOUGH, INC.
SAN BRUNO - CALIFORNIA

Eimac First for quality, dependability and performance



Seven outstanding Eimac tubes for the amateur:

4CX300A
4X250B
4Z50A

465A
4400A

6L75A
4E2/A



MEMBER CLUBS

Amateur Radio Emergency Association

Chicago Amateur Radio Club

Chicago Chapter Young Ladies Radio League

Chicagoland Mobile Radio Club, Inc.

Chicago Radio Traffic Association, Inc.

Chicago Suburban Radio Association, Inc.

Chicago Vocational High School Radio Club

Elgin Amateur Radio Society

Fox River Radio League

Hamfesters Radio Club, Inc.

Illinois Ham Club

Ladies Amateur Radio Klub

Lane Tech High School Radio Club

Midwest V H F Club

North Suburban Radio Club

Northwest Amateur Radio Club

Oak Park and River Forest Radio Club, Inc.

Radio Amateur Megacycle Society

Society Radio Operators

Target City Net Control Operators Association

Wheaton Community Radio Amateurs

York Radio Club



PHIL HALLER

W9HPG

Chairman, CARCC
and Program Chairman

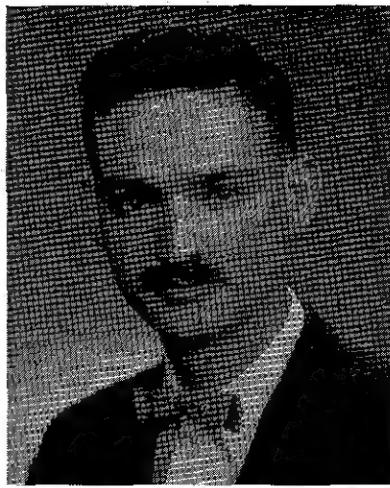
GREETINGS FROM THE CHICAGO AREA RADIO CLUBS

To all radio amateurs, their YLs, XYLs, and friends, the Radio Clubs of the Chicago Area extend greetings and a hearty welcome.

In sponsoring this, our third Convention, it has been our purpose to provide a medium for bringing to you talks and discussions on the latest developments in the art, an interesting and instructive display of the latest apparatus and equipment, and a place where friend may meet friend.

It is our hope that you will enjoy the features arranged for your entertainment and study, and that you will meet the men and women who have been on the other end of our QSOs.

PHIL HALLER



JORDAN KAPLAN

W9QKE

General Manager
9th National Amateur Radio Convention

Welcome!

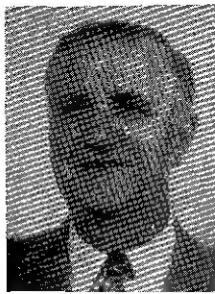
This 9th National Amateur Radio Convention of the American Radio Relay League represents the work of over 200 HAMS in the greater Chicago Area and over eighteen months of planning.

With the diversified interests in Ham radio today, we have attempted to have each facet of our hobby represented in the program. We have drawn from what we believe to be the finest talent in the electronic industry, to present to those attending, the latest in technical information concerning our hobby.

I would like to acknowledge the fine cooperation of the headquarters personnel of the American Radio Relay League, the production team of QST magazine, the members of the Chicago Area Radio Club Council, Inc., and above all, the entire staff of this 9th National Convention, without whose help, this convention would not be possible.

JORDAN KAPLAN

CONVENTION COMMITTEE



LADD SMACH
W9CYD
Asst. Gen. Mgr.



BILL TRAXLER
W9FUJ
Treasurer



SAM NILES
W9FBP
Registration



SANDY LOEY
W9NDN
ARRL Booth



ED McMULLIN
K9AXK
Food Functions



ROBERT SEALS
K9AHK
Publicity



STEVE MAKOWSKI
K9HBQ
Publicity



BETTY SANDBERG
W9STR
Publicity



ROBERT DRAPEAU
K9AJW
Program Book



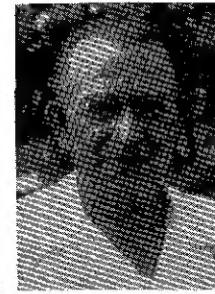
BUD BALASTY
W9QCR
Hotel Arrangements



WAYNE DOUGLAS
W9HWN
Contest Awards



DONALD DE JONG
W9KUJ
Prizes



GEORGE GRAUE
W9BKJ
Wouff-Hong



WILLIAM HARPER
W9BWM
License Exams

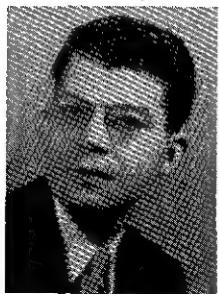


JOSEPH KADLEC
W9UIN
Novice



J. E. TERRAS
W9UBJ
Novice

CONVENTION COMMITTEE



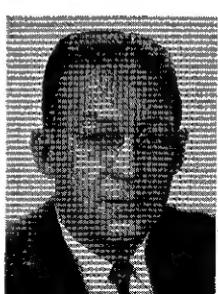
SANDY GALLUP
W9HXI
Signs



ARTHUR SWINFIN
W9DO
Traffic



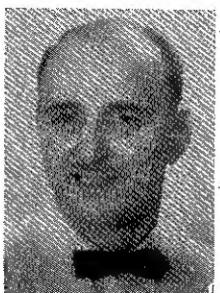
GEORGE BOYD
W9SPT
RTTY



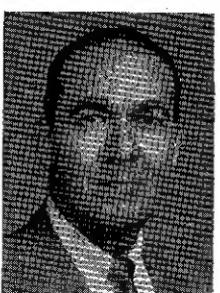
BUD RUNZEL
W9OGA
SSB



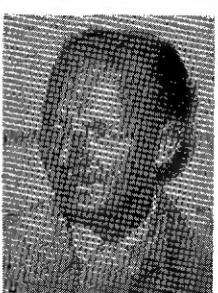
JOHN LANDECK
W9WOK
VHF



ANTHONY KRIZ
W9SPB
A.R.E.C.-R.A.C.E.S.

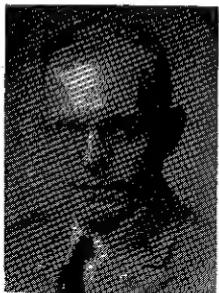


MYRON HEXTER
W9FKC
DX-W9DXCC

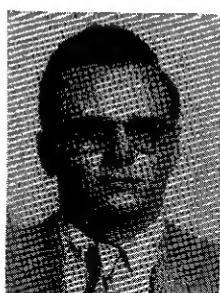


BYRON LINDHOLM
W9OA
MARS

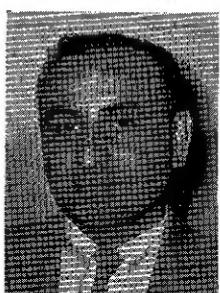
ADDITIONAL CONVENTION SPEAKERS



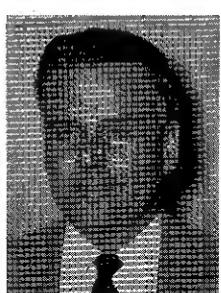
MAJ. W. ROBSON
W4ADZ



WALTER BAIN
W4LTU



PHILLIP CATONA
W2JAV



THOMAS STEWART
W2TBD

ACKNOWLEDGMENTS

We gratefully acknowledge the help and co-operation of the

Lloyd Alm, W9VRW
Capt. S. P. Aurelio, MARS
Reuben Balfour, W9PBM
Mrs. Reuben Balfour
Edward Baran, W9UML
James Baron, W9TVF
Vern Bowman, W9FMJ
Edward Branchfield, W9SRJ
William Cannon, W9ILS
Mrs. Cannon
Bert Cottrell, W9OCV
Al Cox, W9UAQ
Evelyn Cudio, K9EMS
Jerry Dahl, W9TTQ
J. E. DeJong
Walt Diam, W9REM
Hal Drapeau, K9BOV
Paul Edwards, W9NDA
George Eggert, W9UTK
Ike Eichorst, W9RUK
Everett Ellsworth, W9JMG
Clarence Ennes, K9AEC
Frank Eskuchen, W9ZNY
Laurence Finnem, K9EEC
Frank Fisher, W9BMJ
Bill Flapan, K9BBC
Larry Gleason, K9HOY
Thomas Goetzinger, W9VVO

Joseph Hadfield, W9PVK
David Halliburton, W9EQG
Fred Haneline, W9UDD
Ev Hanna, W9NWK
Ross Hansch, W9RBI
Elsie Harper
Lylas Heintzman, K9BZI
George Hinkes, W9YXN
Lynn Hirshman, KN9GNQ
Raymond Hupp, W9CLF
Gladys Jones, W9MYC
Robert Jones, W9DWD
Howard Karmin
Jim Kastrup, W9JGA
Frank Kilburn, W9ORM
Mrs. L. Knoelke
Mary Koctur, K9BWJ
Jack Kovitz, W9EFI
Mrs. A. Kriz
Joe Kroll, W9EFN
Dr. T. Krysinski, W9SQE
Walter Lang, KN9GNX
Paul Lind, W9CAA
George Lindeman, W9QQS
E. J. Lowe, W9PVO
Steven Makowski, W9YYS
Frank McDonnell, W9YUC
Harold McKissick, W9LCA

following people who assisted the various committee chairmen in making this convention a success.

Mel Mendelsohn, W9OBW

Frank Merlik, W9PVE

Ralph Miller, W9BOZ

Ray Morrison, W9GRW

George Nesbed, W9LQF

Gil Newholm, W9YUM

Bob Paculat, W9JBT

Douglas Pavek, W9FDX

Dorothy Petersen, KN9ESB

E. A. Peterson, F.C.C.

Vergne Petersen, K9BBK

Wm. Peterson, W9VTW

Boyd Phelps, WØBP

Gene Pollak, W9SPM

Mark Potter, W9FQU

Bert Prael, KN9CNY

William Procunier, W9HEP

Ernest Rothert, W9YLY

Bill Runzel, W9TRP

Arthur Saboe, W9LNM

Frank Sare, W9UPN

John Scarvaci, W9GIL

A. G. Scheib, W9QVO

Alex Scherer, W9EU

Edward Schmeichel, W9YFN

Bernice Schmidt, W9SJR

Dick Schnell, K9HPD

Marge Schum, K9EMP

Ignas Schwinn, W9ROS

Tom Seese, W9LZ

Jack Shaddon, W9KTY

Bennie Sliwinski, K9BTY

Ladd Smach, W9CYD

Ken Smith, W9KOY

Mike Smith, K9GHV

Ken Solomon, W9MEC

Ronald Stefanskie, W9ZIH

John Stokely, K9APQ

Jim Stubner, W9QKM

Charles Stulik, W9RPK

Bill Swanson, W9BOW

Carl Swanson, W9EJ

H. J. Swanson, W9DRN

Leo Tanke Sr., W9SAQ

Evelyn Tibbits, W9YWH

Wm. Tinsley, W9BPW

Mrs. M. Traxler

Charlene Treve, K9CMZ

Ron VaceLuke, W9SEK

Mrs. M. Veach, MARS

Paul Watkins, K9ANC

Leevane Weaver, W9KCW

Bob Weitblecht, W9TCJ

James Wilson, W9BUK

Hank Wood, W9PCB

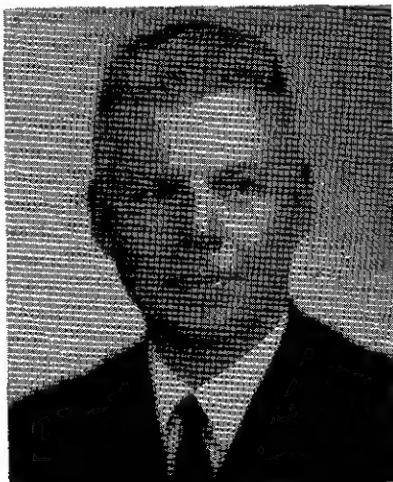
John Young, W9GOB

AMERICAN RADIO RELAY LEAGUE



GOODWIN L. DOSLAND
WØTSN

President, ARRL



ARTHUR L. BUDLONG
W1BUD

General Manager, ARRL



FRANCIS E. HANDY
W1BDI

Communications Mgr., ARRL

AMERICAN RADIO RELAY LEAGUE

JOHN HUNTOON

W1LVQ

Ass't General Manager, ARRL



JOHN G. DOYLE

W9GPI

Director Central Division



GEORGE T. SCHREIBER

W9YIX

**Section Communications Mgr.
Illinois**



SPECIAL GROUP HEADQUARTERS

(These rooms open from 9:00 a.m. — 12:00 Midnight each day)

THIRD FLOOR

TRAFFIC—Room 4
under direction of Illinois Traffic Nets

AREC AND RACES—Room 5
under direction of Chicago AREC and RACES

MOBILE—Room 6
under direction of Chicagoland Mobile Radio Club

RTTY—Room 11
under direction of CHI-RTTY

CRYSTAL ROOM
YLRL Headquarters

CLUB FLOOR

Army and Air Force MARS—Room 14

FCC—Room 15
under direction of Society Radio Operators

VHF—Room 17
under direction of Midwest VHF Club

DX—Room 18
under direction of W9DXCC

FOURTH FLOOR FOYER

QSL—PHOTO—NOVICE CONTESTS

Registration for Code Speed Contests

(SEE PROGRAM 1:30 P.M. SUNDAY)

(NOTE: Admittance to all events by badge only)

PROGRAM

FRIDAY, AUGUST 30, 1957

(All meetings start PROMPTLY at stated CDST time)

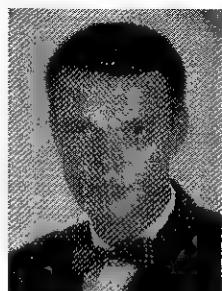
8:00 A.M.— 9:00 P.M.—Registration desks open (all must register)
9:00 A.M.— 5:30 P.M.—Special YLRL registration in Crystal Room
9:00 A.M.—10:00 P.M.—Exhibition Hall open
9:00 A.M.— 5:00 P.M.—Tours available. See signs 4th floor lobby for tours and starting times
7:30 P.M.— 9:30 P.M.—MARS Meeting—Room 14
Major Warren Robson W4ADZ Chief Army MARS
Edward S. Liscombe K4KNY, Harold F. Byrd W4HY
9:00 P.M.—12:00 M.—Grand Ballroom. Ham Get-to-Gether
"The Story of DX," slides and tape by Antique Wireless Association of Rochester, N. Y., and film "Every Single Minute."

SATURDAY, AUGUST 31, 1957

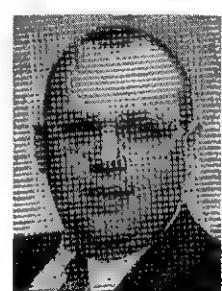
8:00 A.M.— 6:00 P.M.—Registration Desk open
9:00 A.M.—11:00 A.M.—Special YLRL registration in Crystal Room
9:00 A.M.— 6:00 P.M.—Exhibition Hall open
9:00 A.M.— 3:00 P.M.—Chicago CD Mobile Communication Unit on display State Street entrance
X 9:00 A.M.— 4:30 P.M.—Mobile Trouble Shooting Clinic—Room 6
X 9:00 A.M.— 9:50 A.M.—GRAND BALLROOM—"New Types of Trap Antennas" by Andrew A. Andros, WØLTE, Pres. HY-GAIN Antenna Products Co., Lincoln, Neb.
RED LACQUER ROOM—"Printed Circuitry in a Communications Receiver Kit" by Thomas A. Pickering, W9LRA, Knight Electronics Corp., Chicago, Ill.
9:15 A.M.—10:15 A.M.—Novice Examinations (FCC) Room 15, Wm. Harper, W9BWM in charge
9:30 A.M.—10:50 A.M.—VHF 432 MC Hidden Transmitter Hunt, Grant Park, hotel if raining. Conducted by Richard Gillette, W9RSU and Paul Watkins, K9ANC
10:00 A.M.—10:50 A.M.—GRAND BALLROOM—"Modernization of the Amateur Bands with Synchronous Communications" by John K. Webb, WØAHHM/2. General Electric Co., Light Military Electronic Equipment Dept., Utica, N. Y.
RED LACQUER ROOM—"Modernizing Your Receiver with Adaptors" by Byron Goodman, W1DX, Assistant Technical Editor, QST (ARRL)
10:30 A.M.—12:00 N.—Technician Exams (FCC) Room 15
11:00 A.M.—11:50 A.M.—GRAND BALLROOM—"Radio Tracking of the Earth Satellite" by Roger Easton, Naval Research Laboratory, Washington, D. C.



ANDREW ANDROS



THOMAS PICKERING



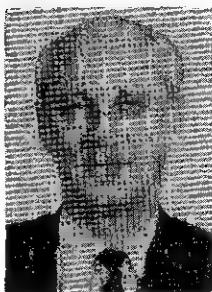
JOHN WEBB



BYRON GOODMAN



ROGER EASTON



FRITZ FRANKE

~~X~~ RED LACQUER ROOM—"Applications of Transistors in Amateur Equipment" by Danny Weil VP2VB, and Fritz A. Franke, The Hallicrafters Co., Chicago, Ill.

12:00 Noon—1:30 P.M.—Time for Lunch. View Exhibits, etc.

1:30 P.M.—4:20 P.M.—DX Forum, Room 18. DX Expedition Men. DX Slides. Talk by John Doyle W9GPI, Doug Pavek, W9FDX presiding. All DX'ers invited

1:30 P.M.—3:00 P.M.—General Class Examinations (FCC) Room 15

1:30 P.M.—5:30 P.M.—RTTY Demonstrations—Technical Meeting. Room 11. Boyd Phelps, WØBP

1:30 P.M.—2:20 P.M.—GRAND BALLROOM—"VHF DX How and When" by Ed Tilton, W1HDQ, VHF Editor QST (ARRL)

~~X~~ RED LACQUER ROOM—"The How and Why of Beam Antennas" by George B. Ashton, W9PNV

2:00 P.M.—3:50 P.M.—MARS Get-to-Gether. Room 14

2:30 P.M.—3:20 P.M.—GRAND BALLROOM—"The Amateur and the IGY Program" by Mason Southworth, W1VLH, IGY Project Coordinator (ARRL)

~~X~~ RED LACQUER ROOM—"Harmonic Elimination and TVI" by Lewis G. McCoy, W1ICP, Technical Assistant, QST (ARRL)

3:30 P.M.—5:00 P.M.—Extra Class Examinations (FCC) Room 15

3:30 P.M.—4:20 P.M.—GRAND BALLROOM—"The Ionosphere and DX" by George Grammer, W1DF, Technical Editor, QST (ARRL)

RED LACQUER ROOM—Forum—"Your Future in Amateur Radio" by Joseph H. Kadlec, W9UIN, presiding.

"Why the ARRL?" A. L. Budlong, W1BUD, General Manager, ARRL

"Traffic and Emergency Work—The ARRL Field Organization," F. E. Handy, W1BDI, Communications Mgr.

"Operating Procedures—ARRL Contests and Awards," John Huntoon, W1LVQ, Assistant General Manager

4:30 P.M.—6:00 P.M.—SPECIAL GROUP MEETINGS—

Traffic Room 4—Panel discussion: Merits of CW—PHONE—and RTTY in traffic handling. Art Swinfin, W9DO Moderator

AREC/RACES Room 5—Jack Stanton W9PSP "Emergency Communications in Illinois." Charles Bert, W9UBY "Emergency Chalk talk for 6M Operators." William Reed, W9PAS "Operation Whiting." Gladys Jones, W9MYC presiding

~~X~~ Mobile Group, Room 6—Mobile forum, George Lindemann, W9QQS presiding

RTTY, Room 11—Forum with WØBP—W9SPT—W9GRW Novice Forum—RED LACQUER ROOM—Continuation of Novice Forum

MASON SOUTHWORTH



GEORGE GRAMMER

DX, Room 18—"The Story of DX" film slides and sound, Bruce Kelley, W2ICE and The Antique Wireless Ass'n, Rochester, N. Y. Introduction of DX notables, with short talks

VHF Technical Session—GRAND BALLROOM—

Paul M. Wilson, W4HHK "50 mc. Array for Scatter Communication." Joseph H. Heuer, W9YNQ "Channel One," John Landek, W9WOK presiding

7:00 P.M.—8:50 P.M.—MARS and State Directors N.C.S. Meeting, Room 14, Byron Lindholm, W9OA presiding

7:00 P.M.—9:30 P.M.—RED LACQUER ROOM—1st National SSB Dinner. Fred Schnell, W4CF presiding. Bud Runzel, W9OGA, Chairman. Admiral H. C. Bruton, W4IH, speaker

7:00 P.M.—9:30 P.M.—RTTY Dinner—Room 11. ZL1WB Honored guest

7:00 P.M.—9:30 P.M.—VHF Dinner—Room 17

7:00 P.M. 10:00 P.M.—DX Dinner—Room 18. Speaker: Bob White, W1WPO (ARRL), Hank Meyer, YA1AM. Danny Weil of "Yasme" fame. Myron Hexter, W9FKC, MC.

10:00 P.M.—11:30 P.M.—GRAND BALLROOM—Entertainment for all. Doors open at 9:30 P.M.

12 Midnight—WOUFF-HONG Initiation—RED LACQUER ROOM

SUNDAY, SEPTEMBER 1, 1957

(All meetings start promptly at stated CDST time)

10:00 A.M.—6:00 P.M.—Registration Desks open

10:00 A.M.—12:00 M.—Mobile Transmitter Hunting Forum Room 6, W9QQS presiding.

9:15 A.M.—10:15 A.M.—NOVICE EXAMINATIONS (FCC) Room 15

9:30 A.M.—5:00 P.M.—Exhibition Hall open

10:00 A.M.—10:50 A.M.—GRAND BALLROOM—"Antenna and Feeder Wave Patterns Visualized." Talk and Demonstration by Richard Howe, W8CBN, Denison University

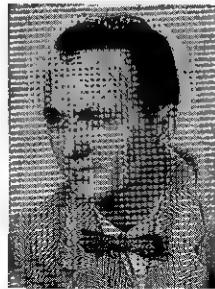
RED LACQUER ROOM—"The AREC & RACES," Ed Handy, W1BDI, Communications Mgr., ARRL; George Hart, W1NJM, National E.C.

10:30 A.M.—12:00 N.—TECHNICIAN EXAMINATIONS (FCC) Room 15

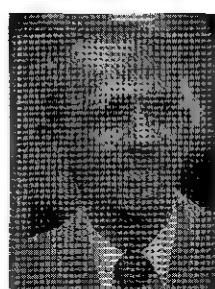
10:30 A.M.—12:00 N.—AT PLANETARIUM (lake front) VHF group. Obtain directions in the VHF room. Demonstration and discussion of "The Fundamentals of Astronomy and Origin of Meteors," by Albert V. Shatzel, Director, Adler Planetarium

"Some Aspects of Meteor Scatter Propagation," Walter F. Bain, W4LTU, Physicist, Systems. Inc.

11:00 A.M.—11:50 A.M.—GRAND BALLROOM—"New Developments in Mobile SSB," Preston Simms, WØRH, Collins Radio Co., Cedar Rapids, Iowa



PAUL WILSON



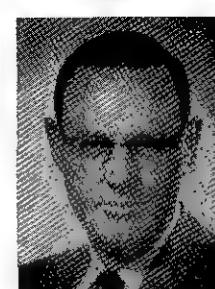
JOSEPH HEUER



RICHARD HOWE



GEORGE HART



PRESTON SIMMS



CHARLES DEWEY



ALBERT PICHITINO



LEWIS McCOY



BRUCE KELLEY



JOHN GAYLORD

RED LACQUER ROOM—"RACES in Defensive Planning," Charles E. Dewey, W8LBM, Warning and Communications Office, FCDA, Battle Creek, Michigan

11:00 A.M.—12:00 M.—DX Meeting—Room 18. Discussion of DX Ethics

1:30 P.M.—2:20 P.M.—High Speed Code Contest in Exhibition Hall Annex

1:30 P.M.—2:20 P.M.—GRAND BALLROOM—"Transmitter and Linear Amplifier Design and Operating Considerations," Albert M. Pichitino, WØEDX, E. F. Johnson Co.

RED LACQUER ROOM—"Construction Practices," Lewis G. McCoy, W1ICP, Technical Assistant, QST (ARRL)

Room 17—"VHF Transmitter Hunting" by T. E. Stewart, W2TBD; E. Kephart, W2SPV; P. Catona, W2JAV of the South Jersey Radio Association

1:30 P.M.—3:00 P.M.—GENERAL CLASS EXAMINATIONS (FCC) Room 15

1:30 P.M.—3:20 P.M.—Monroe St. parking lot: MOBILE JUDGING—by Chicagoland Mobile Radio Club

2:00 P.M.—3:20 P.M.—Room 18—W9DXCC Election and Business Meeting. Distribution of QSLs. Doug Pavek, W9FDX presiding

2:30 P.M.—3:20 P.M.—GRAND BALLROOM—"Pioneers of Wireless" film and tape, by Antique Wireless Ass'n., of Rochester, N. Y. Bruce Kelley, W2ICE, secretary

RED LACQUER ROOM—"Application of a High-Peformance Power Tetrode" by John W. Gaylord, K3AKI, Radio Corporation of America, Lancaster, Penn.

Room 17—VHF Open Forum, F. Sam Harris, W1FZJ presiding

3:30 P.M.—5:30 P.M.—GRAND BALLROOM—ARRL Business Meeting and Forum: Mr. John G. Doyle, W9GPI, Director Central Division, presiding

"Amateur Radio in the Public Interest Convenience and Necessity," Goodwin L. Dosland, WØTSN, President, ARRL

"The Amateur and the 1959 International Radio Conference," A. L. Budlong, W1BUD, General Mgr. ARRL. Open Forum discussion

8:00 P.M.—???.—GRAND BALLROOM—

Leo Meyerson, WØGFQ, at the organ

GRAND BANQUET—Summer B. Young, WØCO, Toastmaster

Presentation of Special Award by Rear Admiral H. C. Bruton, W4IH and ARRL Merit Award by President Dosland, WØTSN

Lieutenant General Francis H. Griswold, KØDWC, USAF "The Strategic Air Command and World Wide Communications"

LADIES PROGRAM

FRIDAY, AUGUST 30, 1957

9:30 A.M.- 1:30 P.M.—Register 4th Floor for Ladies Program

11:00 A.M.- 1:30 P.M.—Tour of WNBQ at Merchandise Mart (Limited to 30 People)
Tour of Art Institute
Tours Leave From 4th Floor Ladies Registration Area

1:30 P.M.- 2:30 P.M.—Lunch at Walgreen's Oak Room Cafeteria (State and Randolph)

2:30 P.M.—Back to Palmer House to see exhibits, etc.
Evening free. Literature on where to go and what to see in Chicago available at registration desk.

SATURDAY, AUGUST 31, 1957

8:00 A.M.- 8:00 P.M.—Register 4th Floor, for Ladies Program and Tours

10:00 A.M.-12:00 M. —Tour of Observation Tower
on Top of Prudential Building

12:30 P.M.- 1:30 P.M.—Luncheon at Marshall Field's Wedgewood Room.
SWOOP. Afternoon Free for Shopping

10:00 P.M.-11:30 P.M.—Special Show in Grand Ballroom

SUNDAY, SEPTEMBER 1, 1957

10:30 A.M.- 5:00 P.M.—Tour of Museum of Science and Industry. Bus Loads at State St. Entrance at 10:30 A.M.
Lunch at Museum in Cafeteria or Sandwich Room.
Bus Returns to Palmer House at 5:00 P.M.
Evening Free to Rest and Change

8:00 P.M. - ? ? ? —Grand Banquet in Grand Ballroom



MARIE MCKISSICK
XYL of W9LCA
Ladies Chairman

2nd INTERNATIONAL YLRL CONVENTION

YLRL PROGRAM

Crystal Room, Palmer House, Chicago

FRIDAY, AUGUST 30, 1957

9:00 A.M.- 5:30 P.M.—YLRL REGISTRATION

11:00 A.M.- 5:00 P.M.—TOURS AVAILABLE—See General ARRL Convention Program

6:30 P.M.- 8:00 P.M.—YLRL SPAGHETTI SUPPER

SATURDAY, AUGUST 31, 1957

9:00 A.M.-11:30 A.M.—YLRL REGISTRATION—Meet and Greet Your Friends!

12:30 P.M.- 3:30 P.M.—YLRL LUNCHEON and FORUM

Mae Burke, W3CUL, Speaker

Eleanor Wilson, W1QON

Louisa B. Sando, W5RZJ

Betty Frederick, W3PVH

Prizes and Souvenirs

6:00 P.M.- 9:00 P.M.—Meet 6 P.M. Sharp in Crystal Room FOR TRIP TO CHINATOWN DINNER

SUNDAY, SEPTEMBER 1, 1957

12:30 P.M.- 3:30 P.M.—Meet in Crystal Room for YL Boat Trip at 12:30 P.M.
Courtesy of Newark Electric Co.

8:00 P.M. - ? ? ? —GRAND BANQUET, Grand Ballroom



BETTY FREDERICK
W3PVH
President, YLRL



MAE BURKE
W3CUL
Edison Award Winner



CRIS BOWLIN
W9LOY
Chairman, YLRL



ELEANOR WILSON
W1QON
QST YL Editor

CONVENTION NURSERY

Private Dining Rooms 7-8-9, 3rd Floor—Hours 10:00 A.M. to 12 Midnight.

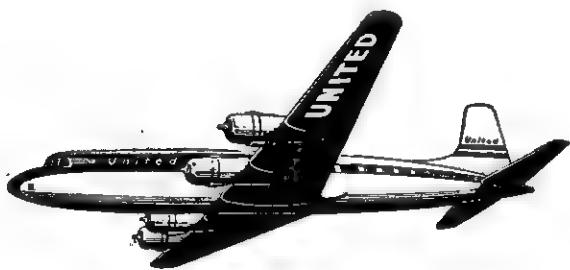
Obtain special free Jr. ARRL Badges at Main Registration Desk, Ballroom Floor.

Registered Nurses will be in attendance.

CONVENTION SIGHT-SEEING FLIGHT

Courtesy UNITED AIR LINES — "THE RADAR LINE"

Lucky Registration winners will be listed on the Special Flight Blackboard in the Prize Shack, starting at 10:00 A.M. Saturday. You must claim your space by 11:30 A.M.



Crew

PILOT W9VZQ
CO-PILOT W9QJG
FLIGHT ENGR. W9NXX
STEWARDESS W1ZCS



Flight Leaves Midway Airport 2:00 P.M., Aug. 31

PRIZE DONORS

List of Suppliers contributing to the "Awards Shack"

Adirondack Radio Supply
Admiral Corp.
Allied Radio Corporation
Alliance Mfg. Co.
American Radio Relay League, Inc.
American Television & Radio Co.
The Astatic Corp.
Barker and Williamson
Cannon Electric Co.
CBS Hytron
Central Electronics, Inc.
Clarostat Mfg. Co., Inc.
Columbia Products Co.
E. F. Johnson Co.
Eitel-McCullough, Inc.
Eldico Electronics
Electro Products Laboratories
Electro-Voice, Inc. R.M.E.
Fairchild Publications
Fort Orange Radio Dist. Co., Inc.
Fredrick Tool and Eng. Corp.
Fretco, Inc.
General Electric Co.
Gonset Div. L. A. Young Spring & Wire Corp.
Greenlee Tool Co.
Hallicrafters, Inc.
Hammarlund Mfg. Co.
Harrington Electronics

The Heath Co.
Hycon Eastern, Inc.
International Crystal Mfg. Co.
International Rectifier Corp.
Jensen Mfg. Co.
Merit Coil & Transformer
Mosley Electronics, Inc.
National Co., Inc.
Philmore Mfg. Co., Inc.
Potter & Brumfield
Radio Amateur Call Book, Inc.
Radio Publications, Inc.
Rafred Enterprises
Regency Div. I.D.E.A., Inc.
John F. Rider Publications, Inc.
R. W. Groth Mfg. Co.
Simpson Electric Co.
Sprague Products Co.
Sigma Instruments, Inc.
The Technical Material Corp.
Telex Inc.
Terado Co.
Trimm Inc.
Ungar Electric Tools, Inc.
United Air Lines
Vaco Products Co.
WRL Electronics
Xcelite Incorporated
Zenith Radio Corp.

AND OTHERS

Special awards will be given at various times
Saturday and Sunday

CONVENTION EXHIBITORS

BOOTH	COMPANY	BOOTH	COMPANY
1-2	American Radio Relay League West Hartford, Conn.	18	Potter & Brumfield, Inc. Princeton, Indiana
3	Astatic Corporation Connecut, Ohio	19-20-21	Allied Radio Corporation Chicago, Illinois
4	Barker & Williamson, Inc. Bristol, Penn.	22-23	The Hallicrafters Co. Chicago, Illinois
5	Electro Voice, Inc. Buchanan, Michigan	24	Eitel McCullough San Bruno, California
6	WRL Electronics Council Bluffs, Iowa	25	Ward Products Corporation Cleveland, Ohio
7	High Gain Antenna Lincoln, Nebraska	26	General Electric Co. Schenectady, New York
8-9	Eldico Electronics Mineola, Long Island, N. Y.	27	Heath Company Benton Harbor 9, Michigan
10-11	Newark Electric Chicago, Illinois	28	Creative Electronic Stamford, Conn.
12	P & H Electronics Lafayete, Indiana	29-30	National Company, Inc. Malden 48, Mass.
13	Hammarlund Manufacturing Co. New York 1, N. Y.	31	Regency Division Indianapolis 26, Ind.
14	Central Electronic, Inc. Chicago 13, Illinois	32	E. F. Johnson Company Waseca, Minnesota
15	Lake Shore Electronics Manitowoc, Wisc.	34-35	Collins Radio Company Cedar Rapids, Iowa
16	Radio Corporation of America Harrison, New Jersey	37	Navy
17	Clegg Laboratories Morristown, New Jersey	38	Air Force
		39	Army

Come to Room 2346 to see—

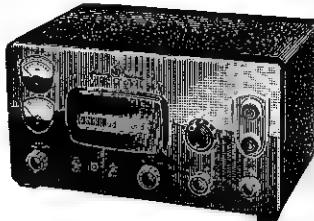
The Perfect Sideband Combination for . . .

2000 WATTS P.E.P.* INPUT

Introducing The VIKING "THUNDERBOLT" LINEAR AMPLIFIER

It's new! More "talk-power" to smash through QRM! A DOMINANT signal on all popular amateur bands!

Here's solid communication power—over 2000 watts P.E.P.* input; 1000 watts CW; 750 watts AM linear; in a completely self-contained desk-top package. Continuous coverage 3.5 to 30 megacycles—instant bandswitching. The "Thunderbolt" may be driven by the Viking "Navigator", "Ranger", "Pacemaker", or other unit of comparable output. Drive requirements are approximately 10 watts in Class AB2 linear, 20 watts Class C continuous wave. When used with the "Pacemaker" or similar exciter, the non-inductive input circuit requires no grid tuning. Two 4-400A tetrodes in parallel, bridge neutralized, work into a wide range pi-network output circuit which will match transmission line impedances from 40 to 600 ohms. Two meters provide constant visual check—plate current meter also reads watts input, and a second meter reads grid current or plate voltage. Completely self-contained with all power supplies . . . 115 or 230 Volts AC 50-60 cycle single phase.



*The F.C.C. permits a maximum one kilowatt average power input for the amateur service. In SSB operation under normal conditions this results in peak envelope power inputs of 2000 watts or more depending upon individual voice characteristics. The Johnson Viking "Thunderbolt" linear amplifier produces these higher powers and is the only equipment available to amateurs which can reach the maximum legal limit of "talk-power".

Catalog No. 240-353-1 Viking "Thunderbolt"
Kit with tubes Amateur Net \$450.00

Catalog No. 240-353-2 Viking "Thunderbolt"
Wired and tested, with tubes Amateur Net \$525.00

Prices subject to change. Anticipated del'vry Nov. 1957

DRIVE IT WITH A "PACEMAKER" MORE THAN AN EXCITER--A COMPLETELY SELF-CONTAINED SIDEBAND TRANSMITTER With VOX-Anti-Trip-Built-In Power Supplies

Your best buy—and here's why!

1.—EXCLUSIVE—Unique circuitry uses only 1 mixer for improved spurious signal rejection greater than 50 db. Eliminates great multiplicity of sum and difference spurious products inherent in systems utilizing 2 or 3 mixers.

2.—BALANCED RANGE AUDIO—Does not sacrifice low frequency response as is usually necessary in filter-type equipments.

3.—BUILT-IN VFO—Highly stable, temperature compensated and voltage regulated. Complete coverage of all bands without crystal switching or re-tuning.

4.—FRONT PANEL CARRIER BALANCE—Provides optimum carrier rejection.

5.—NO FIXED IMPEDANCE OUTPUT CIRCUIT—Wide range pi-network output assures proper load impedance to final amplifiers.

6.—INDIVIDUAL CRYSTAL CONTROL—of sideband generating frequency for each band.



See the Viking "Pacemaker" - "Thunderbolt" power team in action . . . you are invited to drop into Room 2346 at the Palmer House during the National ARRL Convention in Chicago (August 30, 31, and September 1) to operate the perfect sideband combination. Listen for W9ZSO/9 on the air from convention headquarters.

Catalog No. 240-301-2 Viking "Pacemaker"
Wired and tested, with tubes \$495.00



E. F. Johnson Company

2830 SECOND AVE. S.W.

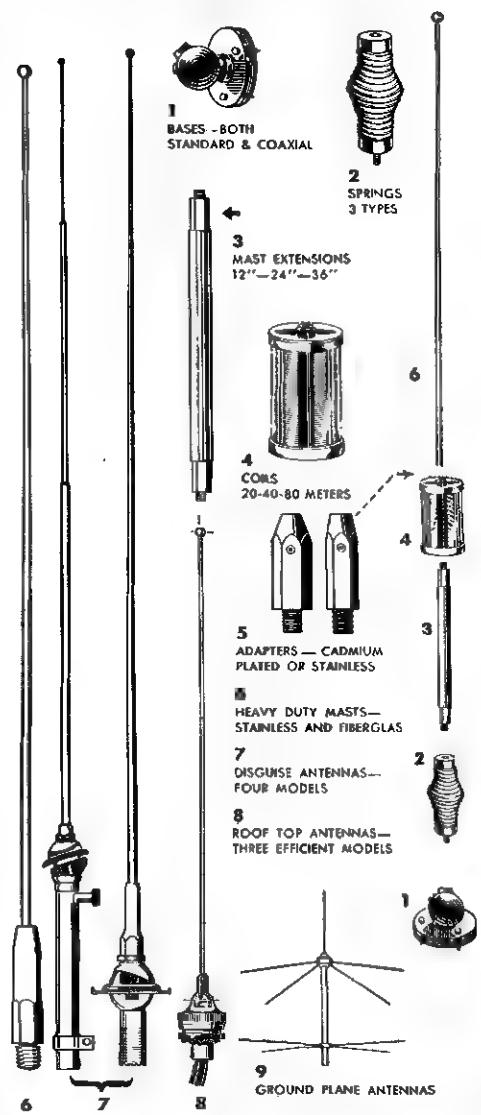
• WASECA, MINNESOTA

NEW

complete line for
communication

WARD ANTENNAS

Pioneer antenna maker now adds new bases, new masts, new springs and coils for all your requirements . . . in all price ranges.



See distributor or write for newest catalog

Ward PRODUCTS CORPORATION

A division of THE GABRIEL COMPANY
Dept. CQ - 1148 Euclid Ave. - Cleveland 15, Ohio

In Canada: Atlas Radio Corp., Ltd.
50 Wingold Ave., Toronto, Ontario

Compliments

of

WOODWARD SCHUMACHER Electric Corporation

Manufacturers of

Quality Transformers & Coils

Western Electric Field Engineering Force

Has Openings for
GRADUATE ENGINEERS

See
GEORGE SPERRY

W4UKA-W9CBJ

In the Palmer House



COMMUNICATOR III

Introducing a new series of complete VHF station "packages" . . . for 2 and 6 meters . . . for ground-to-air and other VHF applications.



New
Linear
Amplifier

These modern successors to the highly regarded Communicator family combine, in a single unit, all the features found previously only in several different models. Communicator III offers you these advantages as well as many more important, wholly new features for improved performance and operating convenience.

Now . . . for even better performance . . . for every model in every frequency range . . . the following:

- Modern inside and out. Finished in attractive Alpine White enamel with knobs in Gun Metal Blue. Cabinet size is approximately the same.
- 6V DC and 12V DC and 115V AC. All three. One vibrator. Simple inside strapping changes voltages.
- Full press-to-talk operation. (Actuated by button on microphone) Transmit-receive switch on panel can be used if desired.
- Receiver: New low-noise X155 RF tube in sensitive "Cascade" with AVC to avoid blocking tendency from very strong locals. Special gong-tuned circuits provide new high order of image rejection. Improved LF selectivity. Gonset noise limiter. Adjustable squelch. Earphone provisions.
- Full-vision slide-rule-type tuning dial.
- Squelch for silent standby. Control on panel.
- Transmitter: All tunable circuits now have panel knobs. New gong-tuned circuits reduce spurious responses to negligible values. New 6L6GB modulator tube gives heavier modulation.
- Panel meter replaces "Green eye." Meter switches to exciter or RF output or to receiver for indication of relative signal level.
- Provision for 6 crystals with panel selector switch. (Also operation with external VFO.)
- Silicon diodes eliminate rectifier tubes.
- New line includes Linear Amplifiers in all frequency ranges and entirely new VFO which has ranges for both 2 and 6 meters.

less microphone and crystals. **269.50**

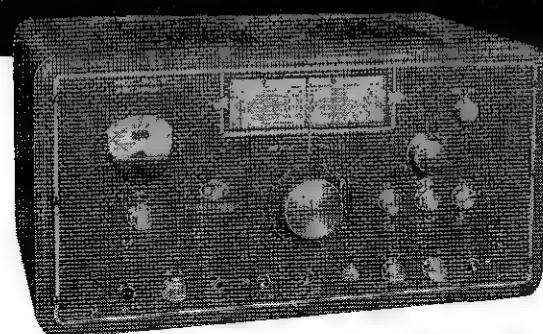
Deliveries start in September. Better get your order in now.

GONSET
BURBANK, CALIFORNIA

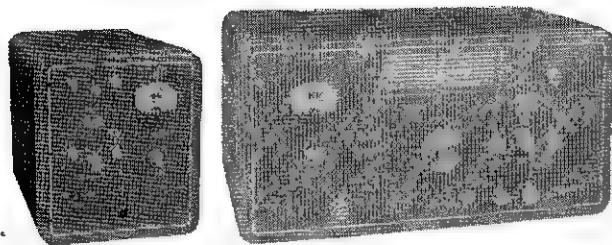
DIVISION OF L. A. YOUNG SPRING & WIRE CORPORATION



B&W TRANSMITTER GROWS WITH THE RADIO AMATEUR



5100-B



51SB-B

*If you have a Viking I or II, Collins 32 V series, or other commercial or composite home-built rig, get the Model 51SB. It's similar to the 51SB-B, but contains a power supply which you'll need with transmitters other than the 5100-B.

Net Price . . . \$279.50

◀ Start with basic Transmitter

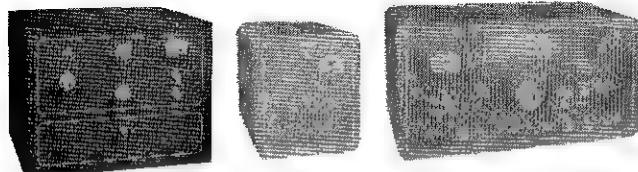
Ideal for the oldtimer and beginner alike. It's a complete medium powered transmitter as it is . . . over 140 watts AM phone . . . 180 watts CW. Completely self-contained including power supply, VFO, and integral band-switching. Covers all ham bands 80 through 10 meters. **YOU CAN ADD SSB AND A 1 KW FINAL TO THE 5100-B AT ANY TIME.**

Net Price . . . \$475.00

◀ Add SSB Generator

If you want to enjoy top quality single sideband, just plug the 51SB-B into the back of the 5100-B transmitter* and you're on the air with a commanding signal. The many features of the 51SB-B include voice-operated control, selectable sideband with a flip of the switch, speaker deactivating circuit, and TVI suppression.

Net Price . . . \$265.00



L-1000-A

All these B&W units are housed in attractive cabinets with a blue-grey wrinkle finish. Panels are finished in the distinctive B&W rich semi-gloss grey, with white lettering and border stripes. They're expertly engineered to assure you of long, trouble-free operation as well as ease of control and tuning.

Prices subject to change without notice

◀ and then tie in 1 KW Final

When you're ready to go the limit—1 kilowatt of power—all you need to do is to add the L-1000-A. This grounded grid linear amplifier will stand out in signal eloquence whenever the going gets rough. The pi-network output gives you precise adjustment of tuning and loading from 80 to 10 meters. It's rated at 1000 watts peak envelope power SSB, 875 watts CW, and 375 watts linear AM phone.

Net Price . . . \$460.00

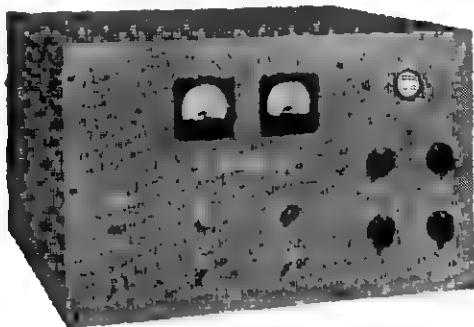


BARKER & WILLIAMSON, INC.

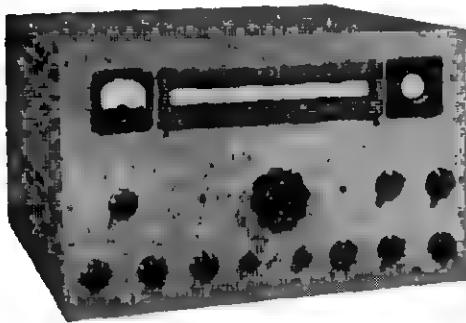
Bristol, Pennsylvania

Engineered *RIGHT* for all three . . . SSB, AM, CW, . . . by

ELDICO



ELDICO SSB-1000



ELDICO SSB-100F

ELDICO SSB-100F

Type of Emission: C.W. — A.M. — SSB

Power Ratings: DC average input SSB-100 watts; A.M. input (two tone test)—60 watts. Peak envelope power input SSB-144 watts. Peak envelope power output SSB-100 watts.

Keying: Grid block, full break-in.

Harmonics and Spurious Responses: Spurious mixer products—50 db or more down. Third order distortion products—35 db or more down. TV interference suppression—40 db or more second harmonic, 60 db or more higher harmonics.

Unwanted Sideband and Carrier Suppression: 50 db minimum attenuation, through low frequency crystalattice filter.

Frequency Stability: Control Oscillator—(800 to 1300 kc) \pm 100 cycles after two minute warm up period. Output frequency—within 300 cycles after five minutes warm up period. Dial accuracy \pm 2 kc after calibration.

Tube Lineup: 22 tubes, including two rectifiers, two voltage regulators, one oscilloscope and one 5894 power amplifier.

There's a lot of good commercial equipment on the market today. And some home-brew gear rivals the best of the factory built rigs. But if you stop and take a critical look at virtually all of these handsome packages you find they are the work of "specialists." Manufacturer "A," convinced that SSB is the panacea for ham work has virtually forgotten that a lot of us still like to pound brass or work AM. W2XXX, who never heard that you can modulate a rig, has a gorgeous c.w. station that can't be employed for anything else. And so it goes, making the selection of a well-rounded design more difficult than might appear at first.

Eldico, long-time pioneers in designing completeness into transmitters, spent a lot of time over the coffee pot and drawing boards to produce the newest and finest package, that's as much at home on the SSB frequencies as in the midst of trunk line A or a 75-meter AM roundtable. What does this mean to you? For one thing you'll get a chance to really enjoy ham radio at its fullest and richest . . . you can find out what the other man likes and you can compete on even terms. Price? For \$795 you start with the 100-watt SSB-100F transmitter exciter. With it you drive ANY final amplifier; or you can add, for \$745, the SSB-1000 kilowatt amplifier. Look over the specs, compare with anything on the market, and then get together with your Eldico distributor to find out what terms can be arranged to put this "Years ahead" gear in your shack.

ELDICO SSB-1000

Low Drive Requirement: 3 watts P.E.P. will drive to full kilowatt. Pi-network Output: Single knob bandswitch. High-efficiency silver-plated Pi-network output circuit. Matches wide range of antenna impedances.

High Harmonic Attenuation: High-Q plate and grid circuits and Pi-network output circuit provide maximum harmonic-attenuation.

Power Rating: DC Input C.W. 1000 watts, A.M. 700 watts

Peak Envelope Power:

Input SSB-1000 watts

Output SSB-625 watts

Frequency Range: 10 thru 80 meters.

Tube Lineup: 9 tubes; two 866, two OA2, one OB2,

one 6AU6, one 1CPL, two 4 x 250B.

Write W2BFY for additional details
if your distributor can't assist you.

29-01 BORDEN AVENUE, LONG ISLAND CITY, NEW YORK

A Division of Dynamics Corporation of America

ELDICO

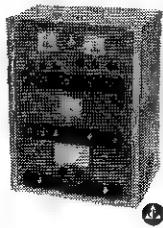
ELECTRONICS

Those who believe quality only is a factor are leaving themselves open to excessive charge. And those to whom price alone is the consideration may spend little but buy even less. We have tried to combine economy with quality to offer the finest performance for the least money . . . honestly believing this to be the wish of the Amateur. Sales acceptance has proven us right. We invite comparison with any other transmitters, . . . dollar for dollar, . . . watt for watt, . . . feature for feature . . . by test or testimonial. After all, it's you who should be the judge!

Now, increased safety factor through use of the 4-400A Final Tube

Globe King 500B

A bandswitching transmitter for 540 watts on fone and CW; 540 watts on SSB (P.E.P.), with 10W external exciter.



Outperforming any rig in its price and wattage range, the King bandswitches 10-160M in a 31x22x14 1/4" handsome cabinet, especially designed for TVI-suppression. The Transmitter is relay controlled; includes a built-in antenna relay; built-in VFO; and separate power supply for modulator section, allowing better overall voltage regulation. Commercial-type compression circuit keeps modulation at high level. King features grid-block keying for signal clarity. Pi-network matches most antennas, 52-600 ohms. Provisions for crystal operation.

Cat. No. 145AF001—Wired & Tested.....\$725.00

All WRL Electronics Transmitters operate on most CAP and MARS frequencies.

Globe Scout 680

65 watts CW; 50 watts on fone, plate modulated.



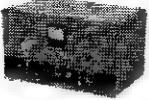
A compact, self-contained, bandswitching transmitter for operation of the 6 through 80 meter bands, with built-in power supply. High level modulation is maintained. TVI-suppressed cabinet. Pi-network output on 10-80M, link-coupled on 6M, matching into low impedance beams. New type, shielded meter. Globe Scout 66 is identical, except bandswitching 10-160M. Size: 8x14x8".

Model 680
Cat. No. 145AF007—Kit.....\$89.95
Cat. No. 145AF006—Wired & Tested...\$109.95
Model 66
Cat. No. 145AF005—Wired only.....\$99.95

FCDA Certified on factory wired and tested models for crystal controlled operation.

Globe Chief 90

A completely bandswitching, 90 watt transmitter for 10-160M.



Here's a compact, 8x14x8", sturdy rig with well-filtered, built-in power supply. Pi-network matches most antennas from 52-600 ohms. Modified grid-block keying is employed for maximum safety. Has provisions for VFO input and operation. Kit form includes complete manual and all tubes and parts. Meter and cabinet carefully shielded for reduction of unwanted TVI.

Cat. No. 145AF013—Kit.....\$54.95
Cat. No. 145AF012—Wired & Tested.....\$67.50

Globe Champion 300

A bandswitching, 10-160M, Transmitter for 360 watts CW, 275 watts fone, and 300 watts SSB (P.E.P.), with any 10W external exciter.



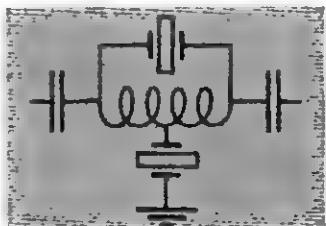
The single-switch bandswitching Champion is extensively TVI-suppressed, filtered and bypassed. High level Class "B" modulation is sustained without usual clipping distortion through use of a new commercial type compression circuit. Pi-network output circuit, 48-700 ohms, built-in VFO, push-to-talk, antenna changeover relay, and improved Time Sequence keying are all features. 1000 volt plate capacity of Final tubes offer 33 1/2% safety factor. Only 12x21 1/4x17" in size, self-contained.

Cat. No. 145AF011—Kit.....\$375.00
Cat. No. 145AF010—Wired & Tested.....\$449.00

**Guaranteed
FOR ONE FULL YEAR**

SEE YOUR NEAREST DISTRIBUTOR
MOST OF THEM CAN OFFER TIME-PAYMENTS TO SUIT YOUR BUDGET

WRL Electronics
34th & BROADWAY
COUNCIL BLUFFS, IOWA



From this exclusive HIGH FREQUENCY filter originates the cleanest signal on the air!



**Hallicrafters new HT-32 transmitter features
5.0 mc. quartz crystal filter... new bridged-tee
modulator... high stability... gear-driven V.F.O.**

• Forget your old ideas about SSB signal clarity! The HT-32 establishes entirely new standards with two major achievements of the world famous Hallicrafters laboratories—yours exclusively in the HT-32:

1. 5.0 mc. quartz crystal filter. Result of a 3-year research program, the crystal filter system now is commercially practical at *high frequencies*. System cuts unwanted sideband 50 db. or more!

2. New bridged-tee modulator. Temperature stabilized and compensated network provides carrier suppression in excess of 50-db. Patented diode application develops

sideband energy from audio voltage. World's most stable modulator. These and many other features make your decision *clear*—compare the HT-32 with any other transmitter available. Your supplier has all the details. Stop by and see him today.

ADDITIONAL FACTS ABOUT THE HT-32

- SSB, AM or CW output on 80, 40, 20, 15, 11-10 meter bands.
- High-stability, gear-driven V.F.O.
- 144 watts peak power input.
- Distortion products down 30 db or more.
- Complete band switching.
- C.T.O. direct reading in kilocycles.
- T.V.I. suppressed.



September is

SSB BONUS* month at ALLIED

Outstanding SSB Gear Ready for Immediate Shipment From Stock

TRANSMITTERS

Collins KWM-1
Collins KWS-1

Hallicrafters HT-32
Hallicrafters HT-33
Johnson 500

Johnson Pacemaker
Johnson Valiant

Central 20-A
Central 100V
Central 600L

Lakeshore Phasemaster
Lakeshore P-400 GG Amplifier

RECEIVERS

Collins 75A4
Hallicrafters SX-101

Hallicrafters SX-100
National NC-109

Hammarlund HQ-110 with HC-10
RME 4350 with 4301

Join the Swing to SSB—It's Easy at Allied!
Get the Deal of a Lifetime in September

*



10% more for you

BONUS TRADE-IN ALLOWANCE

When you trade with ALLIED for SSB equipment in September, we'll give you a whopping 10% MORE than our regular high trade-in allowance for your old ham gear. You'll not only get our regular liberal allowance, but we'll add a big EXTRA 10% to help you get that SSB rig you want. Remember—you get that 10% bonus at ALLIED—during September only. Our usual liberal time payment terms still apply—only 10% down, up to 18 months to pay.

Select your new equipment now from the ALLIED 1958 Catalog—just off the press. It's packed with *everything* in Ham gear, including many new SSB units.

Be sure to visit ALLIED...
special free bus from Palmer House

Take advantage of ALLIED's special SSB trade-ins right NOW, during the convention. Visit our Ham Shack . . . tour the world's largest electronics house. Come to ALLIED at Western and Washington. It's a short distance from the Loop and there's a big parking lot if you drive.

CHECK BUS SCHEDULE AT THE ALLIED DISPLAY

ALLIED RADIO

Serving the Amateur for 37 Years

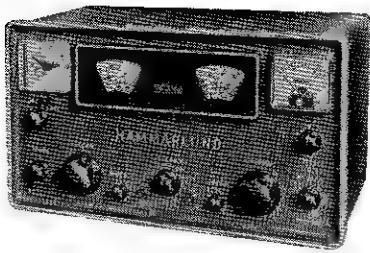
100 N. Western Ave., Chicago 80, Ill.



HQ-100 General-Purpose Communications Receiver — Ten tube superheterodyne with automatic noise limiter. Continuously tunable from 540 KCS to 30 MCS. Electrical bandspread tuning. Q-Multiplier. High sensitivity. Auto-Response automatically adjusts audio bandpass.

\$16900*

*Clock-timer
\$10.00 extra



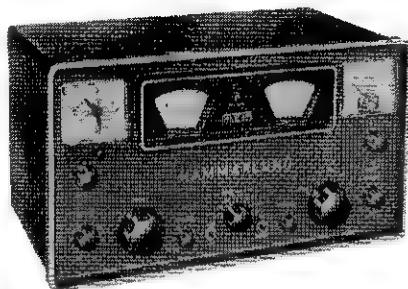
EVERY ONE... A HONEY FOR THE MONEY!

HQ-110 Amateur Communications Receiver

— Dual conversion superheterodyne with automatic noise limiter. Covers 6, 10, 15, 20, 40, 80 and 160 meter amateur bands. Separate SSB linear. Q-Multiplier. Crystal calibrator. Separate stabilized BFO. Crystal control. Auto-response.

\$22900*

*Clock-Timer
\$10.00 extra



HQ-150 Professional-Type Communications Receiver

— Continuously tunable from 540 KCS to 31 MCS. Only receiver to offer selectivity of Q-Multiplier and Crystal Filter. Electrical bandspread. Crystal calibrator. 13 tube superheterodyne with noise limiter. Extremely stable BFO. Uniformly high sensitivity. Extra-high signal-to-noise ratio.

\$29400

HC-10 SSB/CW or AM/MCW Converter

— Works with any receiver having IF between 450 KCS and 500 KCS. Takes seconds to connect. Complete self-contained audio system and power supply. Tuned IF with seven selectivity positions. Vernier type tuning. Razor-sharp slot filter, adjustable over passband.

\$14900



SINCE 1910

HAMMARLUND

HAMMARLUND MANUFACTURING COMPANY, INC.

460 West 34th Street, New York 1, New York

Export: Rocke International, 13 E. 40th St., New York 16, N. Y.

Canada: White Radio, Ltd., 41 West Avenue, North, Hamilton, Canada.



RCA HIGH-PERVEANCE TUBES...

Get more Watts per transmitter dollar!

Known for their ability to handle high power at relatively low plate voltage, RCA high-perveance tubes are the answer for radio amateurs looking for power types that will save substantially on transmitter construction costs.

Here's why RCA high-perveance designs contribute to overall economy:

High-perveance tubes—an original RCA development—enable you to use lower-voltage-rated tank-circuit components. These tubes eliminate the need for very high-voltage plate transformers and very-high-voltage-rated filter capacitors. They enable you to use more reasonable values of pi-network components. And they simplify your insulation problems.

The power tubes pictured here are typical of the many RCA high-perveance types available to provide power up to the legal limit. Ratings on these and other RCA high-perveance types are listed on the chart.

RCA high-perveance tubes are available at your RCA Tube Distributor. For technical data on any of these types, write RCA Commercial Engineering, Section D-15-M, Harrison, N. J.

See how little plate voltage it takes for the power you want

RCA Tube No.		05 Amplifier Service—Max. Amateur Ratings, Class C		DC Plate Input Watts		DC Plate Volts	
	Type	60	60	60	60	60	60
2E26	Beam Power	40	77	600	300		
4X150A	Beam Power	250	200	1250	1000		
807	Beam Power	75	60	750	600		
810	Triode	750	500	2500	2000		
811-A	Triode	260	175	1200	1250		
812-A	Triode	760	175	1200	1250		
813	Beam Power	500	400	7500	2000		
815	Twin Beam Power	75*	60*	50*	400		
829-B	Twin Beam Power	120*	90*	750	600		
832-A	Twin Beam Power	50*	35*	250	600		
5763	Beam Power	17	15	350	300		
6146	Beam Power	90	67.5	750	600		
8006	Triode	750	500	7500	7000		
8005	Triode	140	240	1500	1250		

*Total for Tube

POWER TUBE AUTHORITY

Now 236-page RCA Transmitting Tube Manual 77-4 covers 108 power types, and 13 rectifier types. Includes theory, data, installation, application, and useful circuits. See your RCA Tube Distributor. Or send \$1.00 to RCA Commercial Engineering, Harrison, N. J.



TUBES FOR AMATEURS
RADIO CORPORATION OF AMERICA
Tube Division • Harrison, N. J.



Mary Burke, W3CUL, 1956 Edison Award winner, is honored at the banquet ceremony held February 28, 1957, at Washington's Mayflower Hotel, with Rear Admiral H. C. Bruton, chief of naval communications, the principal speaker. Left to right: Admiral Bruton, Mrs. Burke, and L. B. Davis, general manager of the G-E electronic components division. (Official U. S. Navy photograph)

NOMINATIONS NOW OPEN FOR 1957 EDISON AWARD

The 1957 Edison Award once more will honor an amateur who has rendered outstanding public service—will be a tribute to the assistance which all radio amateurs offer their communities and the nation when need arises.

A committee of distinguished and impartial judges will select the Edison Award winner. He will be chosen from candidates who are nominated in letters from you and others.

Since only names submitted by letter will be considered for the Award, your participation and support are essential. Start now to choose a suitable candidate! The rules at right will help you in preparing your nominating letter. Mail it to *Edison Award Committee, General Electric Company, Electronic Components Div., Owensboro, Ky.*

RULES OF THE AWARD

WHO IS ELIGIBLE. Any man or woman holding a radio amateur's license issued by the F.C.C., Washington, D.C., who in 1957 performed a meritorious public service in behalf of an individual or group. The service must have been performed while the candidate was pursuing his hobby as an amateur within the continental limits of the U. S.

WINNER OF THE AWARD will receive the Edison trophy in a public ceremony in Washington, D.C. Expenses of his trip to that city will be paid.

\$600 GIFT. Winner will be presented with a check for this amount in recognition of the public service he has rendered as a radio amateur.

WHO CAN NOMINATE. Any individual, club, or association familiar with the public service performed.

HOW TO NOMINATE. Include in a letter a full description of the service performed, as well as the candidate's name, address, and call letters. Your letter of

nomination must be postmarked not later than January 3, 1958.

BASIS FOR JUDGING. All entries will be reviewed by a group of distinguished and impartial judges. Their decisions will be based on (1) the greatest benefit to an individual or group, (2) the amount of ingenuity and sacrifice displayed in performing the service. The judges will be:

E. ROLAND HARRIMAN, Chairman, The American National Red Cross.

ROSEL N. HYDE, Commissioner, Federal Communications Commission.

GOODWIN L. DOSLAND, President, American Radio Relay League.

Winner of the Award will be announced on or before Thomas A. Edison's birthday, February 11, 1958.

Employees of the General Electric Company may nominate candidates for the Edison Radio Amateur Award, but are not permitted to receive the Award.

GENERAL  ELECTRIC

166-1B1

NOTES

LAKESHORE announces the new and improved



CONDENSED SPECS

- SWITCHABLE EYE
FOR TUNE UP OR
DISTORTION CHECKING
- IMPROVED 9 MC
STABILITY
- NEW STEEL CHASSIS
- TALK ON FREQUENCY
OR ZERO BEAT
- VOLTAGE REGULATION
- MANY OTHER FEATURES

*See us and our complete line
at the 9th ARRL Convention*

Lakeshore INDUSTRIES
MANITOWOC, WISCONSIN
MANUFACTURERS OF PRECISION ELECTRONIC EQUIPMENT

INDEX TO ADVERTISERS

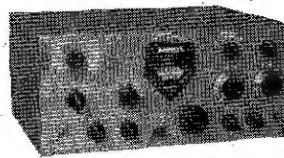
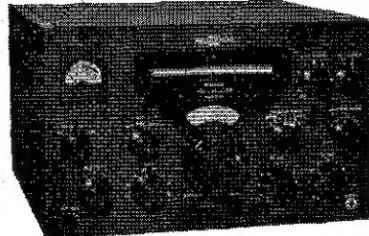
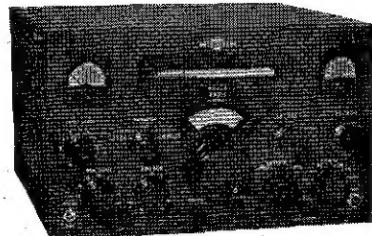
Allied Radio	29
Barker & Williamson, Inc.	25
Collins	Inside Back Cover
Eitel-McCullough, Inc.	Inside Front Cover
Eldico Electronics	26
General Electric	32
Gonset	24
Hallicrafters	28
Hammarlund Mfg. Co.	30
Hy-Gain Antenna Products	Back Cover
E. F. Johnson Company	22
Lakeshore Industries	34
Radio Corporation of America	31
Ward Products Corp.	23
Western Electric	23
Woodward Schumacher	23
WRL Electronics	27

performance...

the basis for a great reputation!

From the first Collins Amateur equipment to the present SSB station, Collins performance has been the standard for comparison.

See your Collins distributor. You can own the finest for a few pennies a day.



KWS-1

POWER AMPLIFIER INPUT — 1 kw peak envelope power SSB, 1 kw CW operation.

R-F OUTPUT IMPEDANCE — 52 ohms.

FREQUENCY BANDS — 80, 40, 20, 15, 11, 10 meters.

EMISSION — SSB, AM carrier plus one sideband, CW.

HARMONIC AND SPURIOUS RADIATION — (Other than 3rd order distortion products.) Intra-channel radiation is at least 50 db down. All spurious radiation at least 40 db down at output of exciter. Second harmonic at least 40 db down; all other harmonics at least 60 db down.

DISTORTION — SSB, 3rd order products 35 db down or better at 1 kw PEP.

FREQUENCY STABILITY — After 15 minutes warmup, within 300 cps of starting frequency. Dial accuracy: 350 cps after calibration.

AUDIO CHARACTERISTICS — Response ± 3 db, 200 to 3,000 cps. Noise and hum: 40 db or more below reference output level. Input: .01 volts for rated power output.

MICROPHONE INPUT — Will match high impedance dynamic or crystal.

WEIGHT — 210 pounds. Both units.

SIZE — KWS-1 — 10-15/32" high, Power Supply 30" high, 17 1/2" wide, 15 1/2" deep.

RELAY RACK MOUNTING — Mounting brackets kits available for RF Unit and power supply.

Net Price.....\$2,095.00

75A-4

FREQUENCY BANDS — 160, 80, 40, 20, 15, 11, 10 meters.

SIZE — 10-15/32" high, 17 1/2" wide, 15 1/2" deep.

WEIGHT — 35 pounds.

RELAY RACK MOUNTING — Mounting brackets kits available.

NUMBER OF TUBES — 22, including rectifiers.

SENSITIVITY — 1.0 microvolt for 6 db signal-to-noise ratio with 3 kc bandwidth.

AVC CHARACTERISTICS — Audio rise less than 3 db for inputs of 5 to 200,000 uv.

IMAGE AND IF REJECTION — Image ratio at center of each band 50 db or better. IF rejection at center of each band 70 db or better.

AUDIO CHARACTERISTICS — Output — .75 watts with a 3.0 uv signal, 30% modulated. Output impedance — 500 ohms, 4 ohms. Response of audio circuits — ± 3 db 100 cps to 5,000 cps. Distortion — Less than 10%.

MUTING — Provisions for muting the Receiver during key-down operation are provided. A muting voltage of +20 volts must be supplied by transmitter.

FREQUENCY STABILITY (at 14 mc) — Temperature — Less than 1200 cycles drift from 0° to 60° C. Warmup drift — Less than 300 cycles after 15 minute operation. Line voltage — Less than 100 cycles for ± 10 % change. Dial accuracy — 350 cycles after calibration.

Net Price.....\$695.00

KWM-1

RF POWER INPUT — 175 watts SSB PEP or 160w CW.

OUTPUT IMPEDANCE — 50 ohms with not more than 2.5 SWR.

POWER SOURCE — 115 vac 50-60 cps, 320w max, 12 vdc, or 28 vdc, 25a max.

SIZE — Transceiver — 6 1/4" high, 14" wide, 10" deep. AC Power Supply — 6 1/4" high, 7 1/2" wide, 10" deep. DC Power Supply — 4 1/4" high, 9" wide, 5" deep. Speaker cabinet — 6 1/4" high, 7 1/2" wide, 10" deep.

WEIGHT — Transceiver, 15 lbs.; AC Power Supply, 25 lbs.; DC Power Supply, 15 lbs.; Speaker Cabinet, 5 lbs.

FREQUENCY — 14-30 mc continuous. Choice of any ten 100 kc bands by crystal switch. Standard complement of crystals — 14.0-14.1 mc CW, 14.2-14.3 mc SSB, 14.9-15.0 mc calibration with WWV, 21.0-21.1 mc CW, 21.3-21.4 mc SSB, 21.4-21.5 mc SSB, 28.0-28.1 mc CW, 28.1-28.2 mc CW, 28.5-28.6 mc SSB, 28.6-28.7 mc SSB.

FREQUENCY CONTROL — 70K-1 Permeability Tuned VFO.

HARMONIC AND SPURIOUS RADIATION

Carrier suppression — 50 db, unwanted sideband — 50 db, oscillators and mixer products — 50 db, second harmonic — 50 db, 3rd order products — 30 db.

FREQUENCY STABILITY — After 10-minute warmup, within 100 cps. Reset within 1 kc throughout range.

RECEIVER SENSITIVITY — 1.0 uv for 6 db S/N ratio with 3 kc bandwidth.

Net Price.....\$770.00

Collins

CREATIVE LEADER IN COMMUNICATION

COLLINS

Now in Stock...At Leading Amateur Radio Distributors
Everywhere! PROVEN & TESTED...IN THE
WORLD'S HAM SHACKS

the **hy-gain** 3-Element Tri-Bander
ONE FEEDLINE - THREE BANDS (10, 15 & 20M)

There Are More hy-gain Tri-Banders In Use Than All Other 3-Band Beams Combined!

3 Active Elements on Each Band!

Exclusive New Insu-Trap:- a new concept in parallel resonant trap circuits obsoletes old fashioned open-type coils. The only adjustable, completely weatherproof trap. Adjustable capacitor color coded for Fone or CW. Hi-Q coils wound on high impact styron forms which also act as low power factor dielectric for adjustable capacitors. No air dielectric involved. Trap assembly completely enclosed in weatherproof polyethylene cover with 2 grams of silica gel to absorb condensation.

Boom/Mast and Element Clamp:- ruggedly designed 12 Ga. galvanized steel channel for positive grip. Used throughout the entire Tri-Bander Series. Heavily plated and serrated 5/16" U-Bolts.

The "Carpet Beater" Ends:- employed on all Tri-Banders, specially designed of aluminum wire to reduce fatigue caused by vibration, increase the broad band characters of the beam, and to reduce element sag to a minimum.

Split Insulated Dipole:- fed directly with RG-8U ohm coaxial cable and coaxial line balancing choke results in low SWR on all bands. No adjustment necessary.

\$99.75

All specifications furnished are approximate and subject to change. These figures will be subject to change in accordance with conditions of manufacture or construction or other circumstances.

	Model No.	Gain in DB Over Dipole	F/B Ratio in DB	SWR	Max. Power	Horizontal Beam Width	Boom Length	Boom Diameter	Element Diameter	Element Wall	Element Alloy	Longest Element	Approx. Net Wt.
3 Element	152T-3	8 Aver.*	25 Aver.	Less Than 1.5:1	1 Kw	59°	216"	1 1/2" Hot Dip Galv. Steel	1 1/8, 1, 7/8, 3/4"	.058, .049, .035	6061ST6 Ant. 41	31', 9"	58#

* Additional Director Element for Increased Gain and F/B Ratio on 10M, Net \$14.95.

The standard of comparison for three band antenna arrays, because interaction and detuning effects have arrays, because interaction and detuning effects have been eliminated. All hardware hot dip galvanized steel for maximum weather ability. Injection molded polyethylene, styron and cycloolefin plastic used throughout. Complete assembly and installation instructions furnished.

PLUS THE COMPLETE LINE OF HY-GAIN ANTENNA PRODUCTS
ROTO BRAKE - AUTOMATIC & ECONOMY VERTICAL ANTENNAS
5-BAND DOUBLET & DOUBLET COILS - 10, 15 & 20M STANDARD
GLOBE SPANNERS - 2M, 5-ELEMENT . . . 2 M, 10-ELEMENT . . .
6M, 5-ELEMENT AND THE 1-ELEMENT, 2-ELEMENT
AND 5-ELEMENT TRI-BANDERS

hy-gain antenna products

1828 N STREET
LINCOLN, NEBRASKA